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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,804

06/30/2003

Nobuko Yamamoto

03500.015716.1

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07/27/2009

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER

BAUSCH, SARAE L

ART UNIT

PAPER NUMBER

1634

MAIL DATE

DELIVERY MODE

07/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**CONTINUATION**

1. The remarks filed on 07/01/2009 in response to the final office action mailed 04/01/2009 have been thoroughly considered but were not found persuasive and the final office action mailed 04/01/2009 is maintained.
2. The response traverses the rejection of Okamoto. The response asserts that Okamoto only places one sample in each well and that a well does not represent a square section as presently claimed in which spots of different samples are sufficiently spaced to conduct a complex forming reaction in each spot. The response asserts that even if each well is a spot Okamoto does not disclose arranging the wells into square sections so that one type of oligonucleotides is present at a uniform surface density in each such square section and spotting samples as presently claimed. This response has been thoroughly reviewed but not found persuasive. Okamoto teaches preparing a substrate containing three different probes by bubble jet printing (see column 2 lines 36-60) and teaches a substrate with square sections and individual spots to define a matrix (see column 14 lines 1-7). Specifically Okamoto exemplifies an array that has probes spotted in 4 areas on the glass plat in a 3x3mm section followed by hybridization of test DNA, thus Okamoto teaches square sections on the probe array (see also figure 5-6). Additionally, Okamoto teaches two samples being spotted on the array as Okamoto teaches that when a base sequence may be present in a test sample that each sample is supplied to each spot of the probe array to allow hybridization between the target nucleic acid and probe which enables detection of the presence of the target substance in the sample (see column 8 lines 27-62). Thus Okamoto teaches square sections with spots that contain different samples, as Okamoto teaches preparing the substrate with different probes and teaches hybridization of

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different samples to the array. Additionally Okamoto teaches uniform probe density on the solid support (see column 4 lines 25-33). Furthermore, each row or each column can be considered square sections.

3. The response traverses the rejection of Rava on page 5-6 of the remarks. The response asserts that it is pointless in Rava to place plural samples in a single well so that plural spots are spaced from each other and Rava states that when multiple samples are introduced into a single well produce a positive result for a particular characteristic, identification of the sample requires that the assay be rerun with only a single sample per well. This response has been thoroughly reviewed but not found persuasive. It appears as though applicant is traversing the rejection because Rava does not teach each square section sufficiently spaced from each other to conduct a complex forming reaction and that Rava does not teach a uniform layer of probe molecules. Initially, it is noted that the claims merely require that a complex forming reaction occurs and thus although Rava may repeat an assay with a single sample, Rava does demonstrate that a complex formation does occur between the sample and the oligonucleotide, which anticipates the claimed invention. Furthermore, Rava teaches spotting different test samples in each square section as Rava teaches applying different test samples to a row or column, thus the row or column is a different square sections with different test samples that are spotted sufficiently apart to detect a complex formation (see column 8 lines 60-67 and column 9 lines 1-5).

4. The response traverses the rejection of Southern and Brown and asserts that Brown and Southern does not cure the deficiencies of Okamoto and Rava. This response has been thoroughly reviewed but not found persuasive. Southern nor Brown were not cited to

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demonstrate two test samples spotted in separate individual spots in square sections. Okamoto and Rava teach this limitation of the claims as address in section 2-3 above.

5. For these reasons and the reasons of record the rejections of record are maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarae Bausch whose telephone number is (571) 272-2912. The examiner can normally be reached on M-F 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James (Doug) Schultz can be reached on (571) 272-0763. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

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/Sarae Bausch/  
Primary Examiner, Art Unit 1634